

EPA Region 5 Records Ctr.



223118

LETTER REPORT
FOR
TOLEDO TIE TREATMENT SITE
TOLEDO, LUCAS COUNTY, OHIO
TDD S05-9709-011 and S05-9710-001
PAN 7P1101SIXX and 7C0101RSXX

November 17, 1997

Prepared for:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Emergency Response Branch
77 West Jackson Boulevard
Chicago, Illinois 60604

Prepared by: Cedric N. Gibson Date: 11/17/97
Cedric N. Gibson, START Project Manager

Reviewed by: Michel Diekh for Mary Jane Ripp Date: 11/17/97
Mary Jane Ripp, START Assistant Program Manager

Approved by: Michel Diekh for Patrick Zwilling Date: 11/17/97
Patrick Zwilling, START Assistant Program Manager

**ecology and environment, inc.**

12251 UNIVERSAL, TAYLOR, MICHIGAN 48180, TEL. (313) 946-0900
International Specialists in the Environment



ecology and environment, inc.

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November 17, 1997

Ms. Gail Nabasny
START Project Officer
Emergency Support Section
U.S. Environmental Protection Agency
77 West Jackson Boulevard
Chicago, Illinois 60604

Re: Toledo Tie Treatment Site
Toledo, Lucas County, Ohio
TDD S05-9709-011 and S05-9710-001
PAN 7P1101SIXX and 7C0101RSXX

Dear Ms. Nabasny:

On September 18, 1997, the United States Environmental Protection Agency (U.S. EPA) tasked the Ecology and Environment, Inc. (E & E), Superfund Technical Assessment and Response Team (START) to perform a site assessment and provide oversight of potentially responsible parties' (PRPs') removal activities at the Toledo Tie Treatment site, Lucas County, Ohio, under Technical Direction Documents (TDDs) S05-9709-011 and S05-9710-001. The START members conducting site assessment and PRP oversight activities for U.S. EPA On-Scene Coordinator (OSC) Ralph Dollhopf, were Cedric Gibson, Anne Hellie, and Michael Beebee.

SITE BACKGROUND

The Toledo Tie Treatment site is located within the Arco Industrial Park in Toledo, Lucas County, Ohio (41°38'09" North and 83°36'52" West). The Site Location Map is presented in Attachment A, Figure A-1, and the Site Features Map is presented in Attachment A, Figure A-2. The site is bordered to the south by Conrail railroad tracks and to the east by CSX Transportation railroad tracks. Commercial businesses situated on Hill Avenue and along Arco Drive comprise the northern and western borders of the site. The majority of the site property was historically utilized as a site for creosote operations, where railroad ties were treated, dried, and stored. Creosote-related contamination remains on site. Light industrial and commercial operations have been developed on the site. Additional site information can be referenced in the Ohio Environmental Protection Agency (OEPA) Site Inspection (SI) Report for the Toledo Tie Treatment Site, dated September 7, 1993.

SITE ACTIVITIES

Site Assessment Activities: On September 18, 1997, U.S. EPA and START met OEPA representatives to conduct a site reconnaissance. During the site reconnaissance, continuous ambient air monitoring was performed by START with a flame-ionization detector. All air monitoring readings were at background (<0.1 metered units) throughout the site reconnaissance. Stressed (burned and discolored grass) vegetation was observed south of Frenchmens Road, east of the Arco Drive and Frenchmens Road intersection (Attachment B, Photo 9; Attachment D). An additional smaller area of stressed vegetation was observed by START east of LBA Printing, on the east side of Williams Ditch and west of the Radco Company (Radco) location. START noted a tar-like odor in the air; the odor was strong near the ditch, from the intersection at Arco Drive to north of the Radco location. A puddle of creosote-like material was observed migrating from an excavated area near a soil pile located on National Super Service (NSS) property, south of Frenchmens Road and west of NSS' building (Attachment B, Photo 1). The team also observed a layer of brown oil on the surface of Williams Ditch, west of Arco Drive (Attachment B, Photo 3). Dark brown oil and an oil sheen were observed floating on the surface water of Williams Ditch, east of Arco Drive to approximately 100 feet northwest of the Radco location (Attachment B, Photo 2).

PRPs' Removal Activities: On October 1, 1997, U.S. EPA and START returned to the site to document current site conditions and evaluate the potential threats to the surrounding human population and the environment. START observed that the layer of brown oil previously noted in Williams Ditch (September 18, 1997), west of Arco Drive, was no longer evident; therefore, monitoring efforts were concentrated on the ditch between Arco Drive and Hill Avenue. OSC Dollhopf observed dark, oily staining of Frenchmens Road. The staining was observed on the curb and on both sides of the road (Attachment B, Photo 10; Attachment D). The staining was adjacent to the area where a former lagoon location is suspected (Attachment C).

OSC Dollhopf and START met with a representative from NSS and a representative from its environmental contractor, Conestoga-Rovers and Associates (CRA). A representative of NSS reported to OSC Dollhopf that on September 25, 1997, contractors for NSS were cleaning the exterior sewers located south to southwest of its building. The sewer contractors were using a pressure washer to clean and clear the sewer system due to previous sewer backups noted by NSS. The workers noticed a strong tar-like odor and observed black, tar-like material between two of the sewer openings. At this time, an NSS representative inspected Williams Ditch, where the sewer connects to Williams Ditch via an underground concrete conduit. This underground concrete conduit is identified as "I" on Figure A-2. An oil sheen was observed on the water surface in Williams Ditch. The sewer cleaning operations were halted.

NSS' environmental contractor, CRA, was hired to dig test pits west of NSS' building because NSS wanted to re-route the existing sewer line. This was required because the southern sewers became plugged, causing water to build in pools on the ground. After meeting with NSS and CRA, U.S. EPA and START performed an additional reconnaissance of the site. OSC Dollhopf and START investigated sewer openings on the NSS property, located south of the NSS

building. Oil sheens were observed inside sewer openings 4 through 7. A strong tar-like odor originated from the sewer openings.

Continued investigation along Williams Ditch east of Arco Drive, revealed a film-like material on top of the water surface for approximately 150 feet (Attachment B, Photo 8). START documented oily tar-like material on vegetation and banks of Williams Ditch, at the first bend inside of Arco Industrial Park (Attachment B, Photo 7; Attachment D). A garden hoe was used to view black tar-like material believed to be creosote, from north of concrete conduit II, entering Williams Ditch at the south side of the bend. Approximately 50 ducks were observed in and along Williams Ditch south of the Pepsi Cola (Pepsi) parking lot. OSC Dollhopf requested NSS to mitigate the migration of sheens and tar-like material from their sewer connection (I) into Williams Ditch.

On October 3, 1997, START confirmed NSS' cleanup contractor, Philip Services (PS), had placed absorbent boom 4 in Williams Ditch and an additional absorbent boom (boom A) at the mouth of underground concrete conduit I (Attachment B, Photos 5 and 11). The oil sheen upstream of boom 4 had diminished, compared to START's visit on October 1, 1997.

On October 6, 1997, in Williams Ditch, START observed oil migrating to the surface from the sediment in the ditch, forming a sheen which covered the surface of the water for approximately 1,000 feet and terminating at boom 4 east of Arco Drive. A heavy sheen was also observed south of the Pepsi parking lot in Williams Ditch. START noted that the ambient temperature on this day was higher (upper 70's) than on all previous site visits, and the tar-like odor was strong along Williams Ditch, especially near underground concrete conduit II. The tar-like odor was stronger than odors noted during the September 18, 1997, site visit.

On October 8, 1997, a brown oil was observed on the surface of water in the ditch between Arco Drive and absorbent boom 4. The sheen, due to oil migrating to the surface from disturbed ditch sediment, extended along an approximately 500-foot stretch of Williams Ditch, east of Arco Drive. A light oil sheen was observed in the ditch at the mouth of underground concrete conduit III, underneath Hill Avenue. Ambient temperatures were in the mid 70's, and the tar-like odor, noted during several previous site visits, was documented.

On October 10, 1997, U.S. EPA met with representatives from Kerr-McGee (KM), and Hull and Associates, Inc. (HAI), an environmental consulting firm contracted by KM; to discuss time-critical removal actions of creosote-related contaminants in Williams Ditch, the two former lagoons, and suspected creosote migrating to Frenchmens Road. KM retained local environmental cleanup contractors and consultants so that containment and recovery responses requested by the U.S. EPA OSC could be completed. PS and HAI initiated these additional efforts by deploying booms 1 through 3 and 5. START observed that the sheen associated with creosote-like material migration from underground concrete conduit II into Williams Ditch, was not as heavy as during START's October 8, 1997, reconnaissance. START also documented that migrating oil from the sediment and the resultant sheen continued to exist. In addition, a

second absorbent boom (boom B) was located north of boom A.

On October 14, 1997, START received a draft health and safety plan from HAI for review. On October 17, 1997, PS mobilized to the site and began implementing the action plan developed by HAI. PS installed additional absorbent booms (booms 0 and 6) to increase the containment efforts in Williams Ditch. On this same day, PS was replaced by Heritage Environmental Services, Inc. (Heritage), to contain and recover oil from the ditch. HAI began working with the City of Toledo officials and land owners to obtain access to Williams Ditch.

On October 21, 1997, Heritage mobilized a skimmer to the site to begin recovery operations of oil on the surface water that had been consolidated. This method of recovery was determined to be ineffective by HAI because of poor recovery rates. Two 55-gallon drums containing recovered water and oil were staged at the Heritage facility to await completion of disposal arrangements (Attachment D).

On October 27, Heritage mobilized a backhoe to the site to assist in the installation of two solid booms, as part of KM containment activities (Attachment D). Solid boom i was installed in Williams Ditch, east of LBA Printing Company. Solid boom ii was installed south of the Pepsi parking lot (Attachment B, Photos 12-13).

On November 4, 1997, Heritage mobilized a high pressure vacuum truck with a specific attachment (Manta Ray) to recover oil from Williams Ditch. Approximately 2,500 gallons of water and oil were recovered between boom 0 and boom ii. The water and oil were transferred to a 21,000-gallon fractionation tank for storage on the City of Toledo Forestry and Parks Division property.

On November 6, 1997, U.S. EPA and START conducted a site reconnaissance prior to a second meeting in Toledo, Ohio, with the PRPs. HAI was present for the site reconnaissance. During the reconnaissance, the group noted current site conditions. The water in Williams Ditch normally flows in a northeast direction, but the flow of water had reversed to a southwest direction due to windy conditions. This flow direction was also previously documented during an October 16, 1997, site reconnaissance. START observed oil collecting on the east side of boom 0 and oil migrating to the surface through ditch sediments, which continued to produce a sheen between boom 2 and solid boom ii in Williams Ditch.

Hazardous constituents were present in surface water and sediment samples collected from Williams Ditch, and soil samples collected from the former lagoons (OEPA SI Report, 1993). Stressed (burned and discolored grass) vegetation near the former lagoons appears to have been impacted by the hazardous compounds. Stains on Frenchmens Road near the former lagoons, believed to be creosote, have migrated through the pavement. Visible signs of creosote migrating over the curb of Frenchmens Road, near the former lagoon area, have been documented. Historical creosote deposition in lagoon sediments is believed to be responsible for the stressed vegetation and stained pavement of Frenchmens Road. Creosote from the former lagoons is believed to be migrating through the storm sewers into Williams Ditch. During

heavy rainfall and windy conditions at the site, oil on the surface water of Williams Ditch is believed to migrate or be released from the site. Ducks have been observed to swim in and feed near the creosote-contaminated water of Williams Ditch, and are directly exposed to hazardous substances. Based on site conditions documented by START and historical OEPA analytical results, the Toledo Tie Treatment site constitutes a threat to human health and the environment.

The preparation of this Letter Report, with the included attachments, completes the tasks specified in TDD S05-9709-011. Activities specified in TDD S05-9710-001 are ongoing. If you have any questions or need additional information, please contact our office.

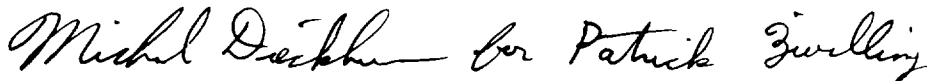
Sincerely,



Cedric N. Gibson
START Project Manager



Mary Jane Ripp
START Assistant Program Manager



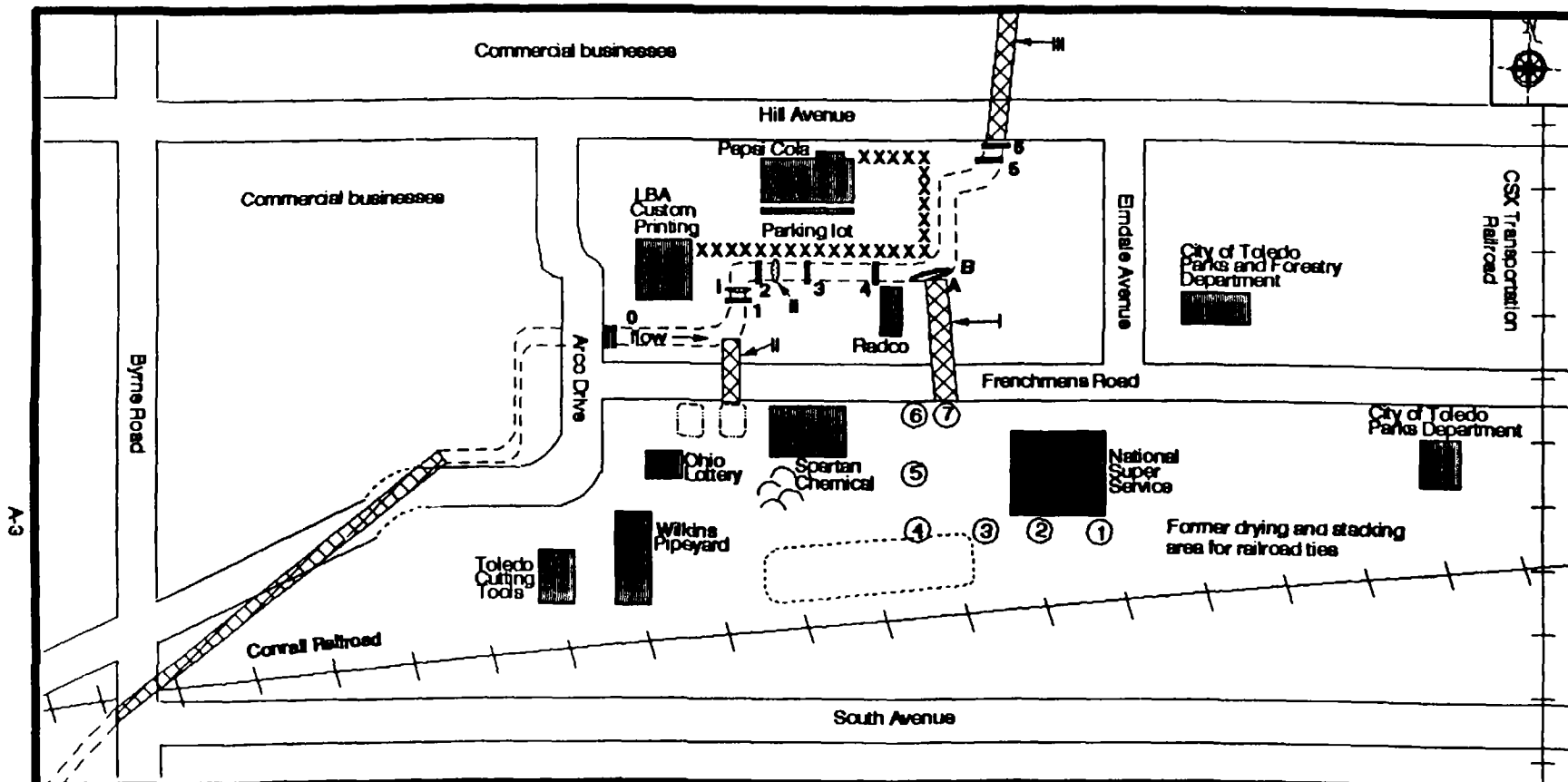
Patrick Zwillling
START Assistant Program Manager

Attachments A - Site Illustrations
 B - Photodocumentation
 C - Aerial Photographs
 D - Videodocumentation

cc: Ralph Dollhopf, U.S. EPA OSC, Grosse Ile, Michigan
 Thomas Kouris, E & E, Chicago, Illinois
 File

Attachment A

Site Illustrations



Legend	
---	Williams Ditch
---	Former creosote tank area
---	Former lagoons
---	Waste pile
+	Railroad tracks
○	Sewer openings
---	Solid boom
---	Absorbent boom
■	Building
⊗	Underground concrete conduit
XXX	Fence

Source/Date:
Ecology and Environment, Inc., September 24, 1997



ecology and environment, inc.
Superfund Technical Assessment And Response Team
Region 5

TITLE	Site Features Map	FIGURE #	A-2
SITE	Toledo Tie Treatment	SCALE	Not to scale
CITY	Toledo	STATE	Ohio
		FIG #	S05-9709-011

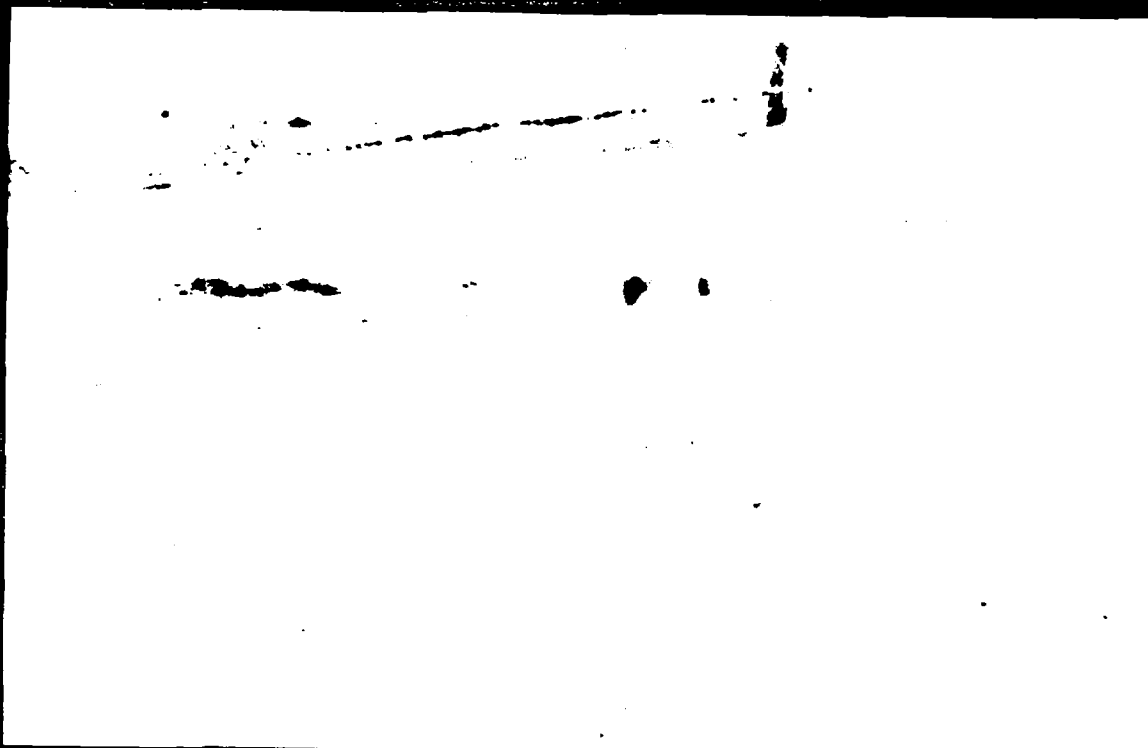
Attachment B

Photodocumentation



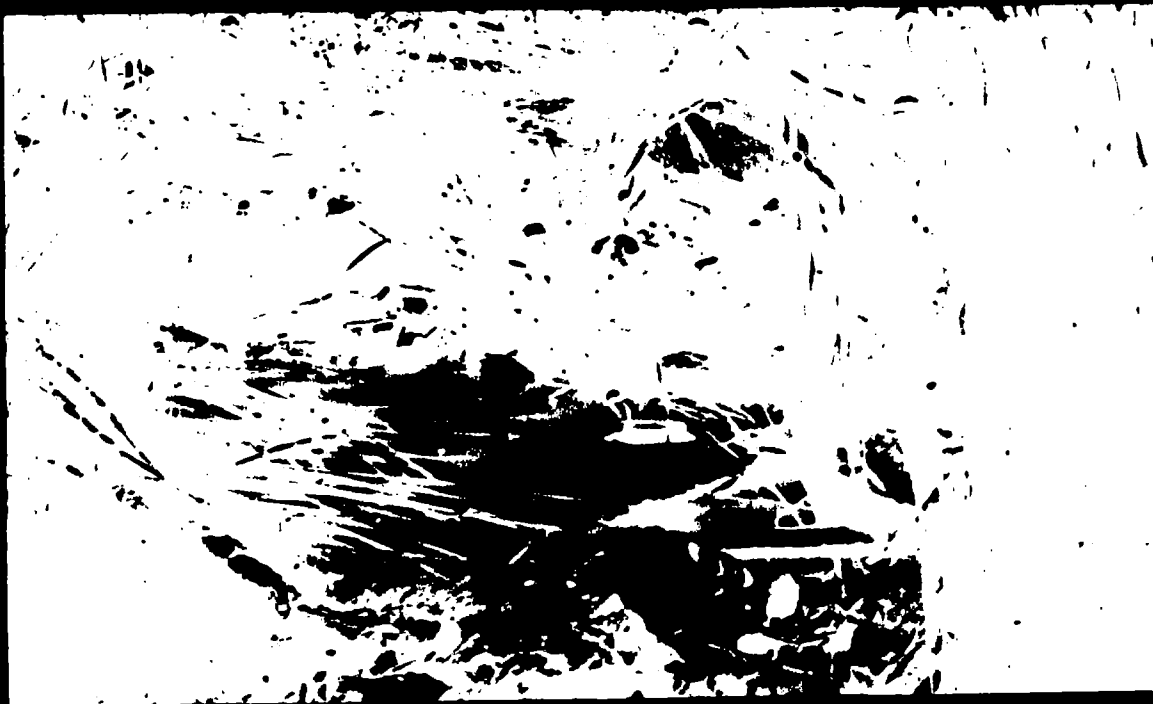
Site: Toledo Tie Treatment
Photo No: 1 (R1F1)
Direction: Northwest
Photographer: C. Gibson

Date: September 18, 1997
Subject: Creosote migrating south
from soil pile.



Site: Toledo Tie Treatment
Photo No: 2 (R1F5)
Direction: Northeast
Photographer: C. Gibson

Date: September 18, 1997
Subject: Oil sheen on the surface
of the water in William Ditch.



Site: Toledo Tie Treatment
Photo No: 3 (R1F6)
Direction: Southwest
Photographer: C. Gibson

Date: September 18, 1997
Subject: Layer of oil in Williams
Ditch west of Arco Drive.



Site: Toledo Tie Treatment
Photo No: 4 (R2F8)
Direction: Northwest
Photographer: C. Gibson

Date: October 3, 1997
Subject: Absorbent boom deployed by
Philip Services in Williams Ditch
north of Radco.



Site: Toledo Tie Treatment
Photo No: 5 (R2F9)
Direction: Northeast
Photographer: C. Gibson

Date: October 3, 1997
Subject: Absorbent boom set by
Philip Services at the drain
leading into Williams Ditch.



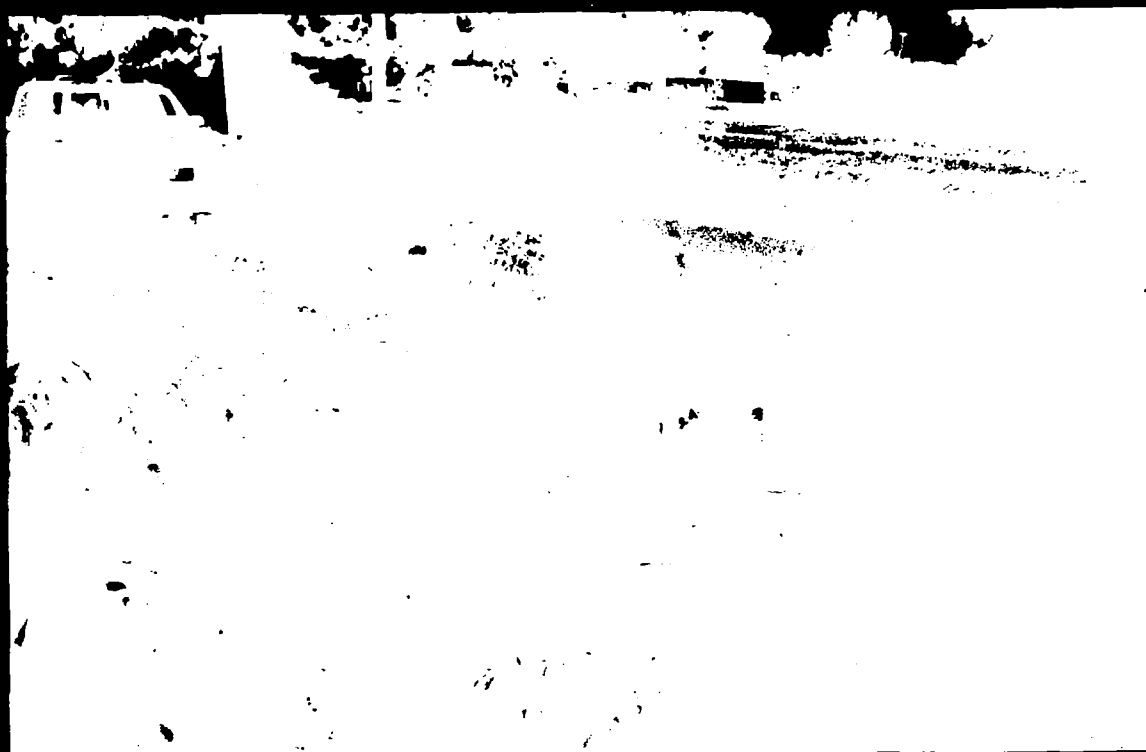
Site: Toledo Tie Treatment
Photo No: 6 (R2F11)
Direction: West
Photographer: A. Hellie

Date: October 1, 1997
Subject: Termination of oil sheen
observed in Williams Ditch
approximately 500 feet southwest of



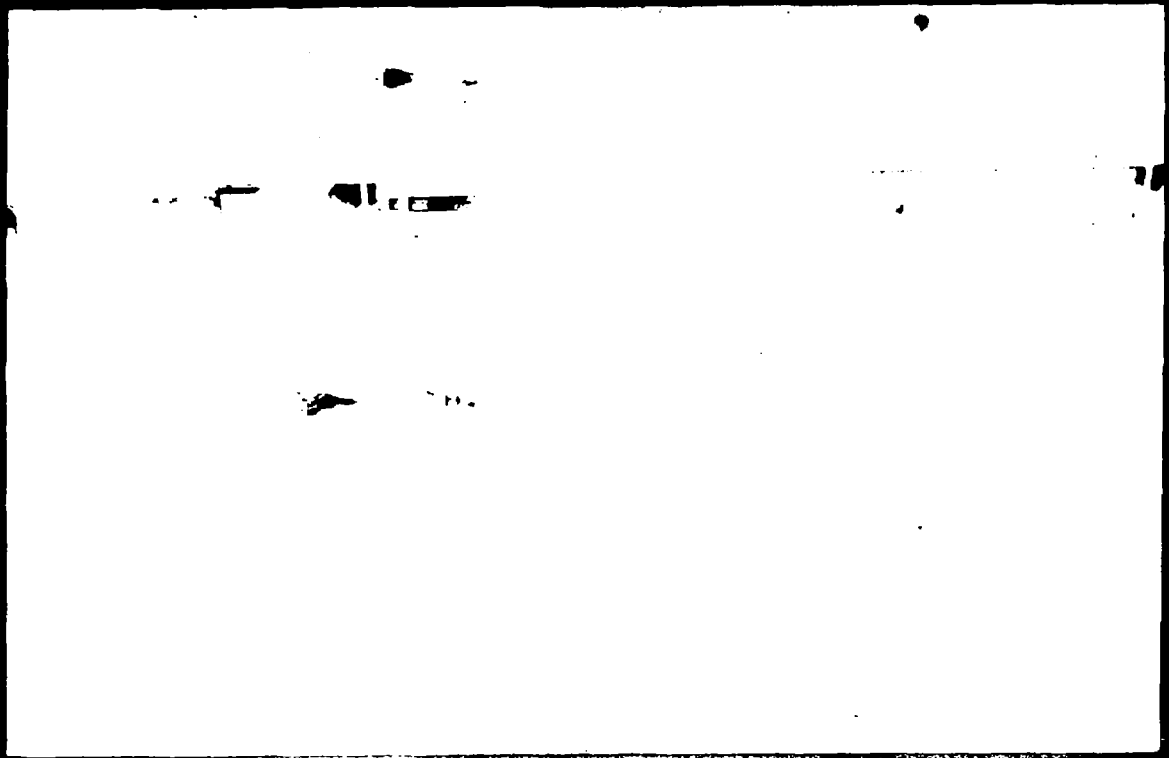
Site: Toledo Tie Treatment
Photo No: 7 (R2F14)
Direction: Northwest
Photographer: A. Hellie

Date: October 1, 1997
Subject: Creosote and oily material
 located along the south edge of
 Williams Ditch.



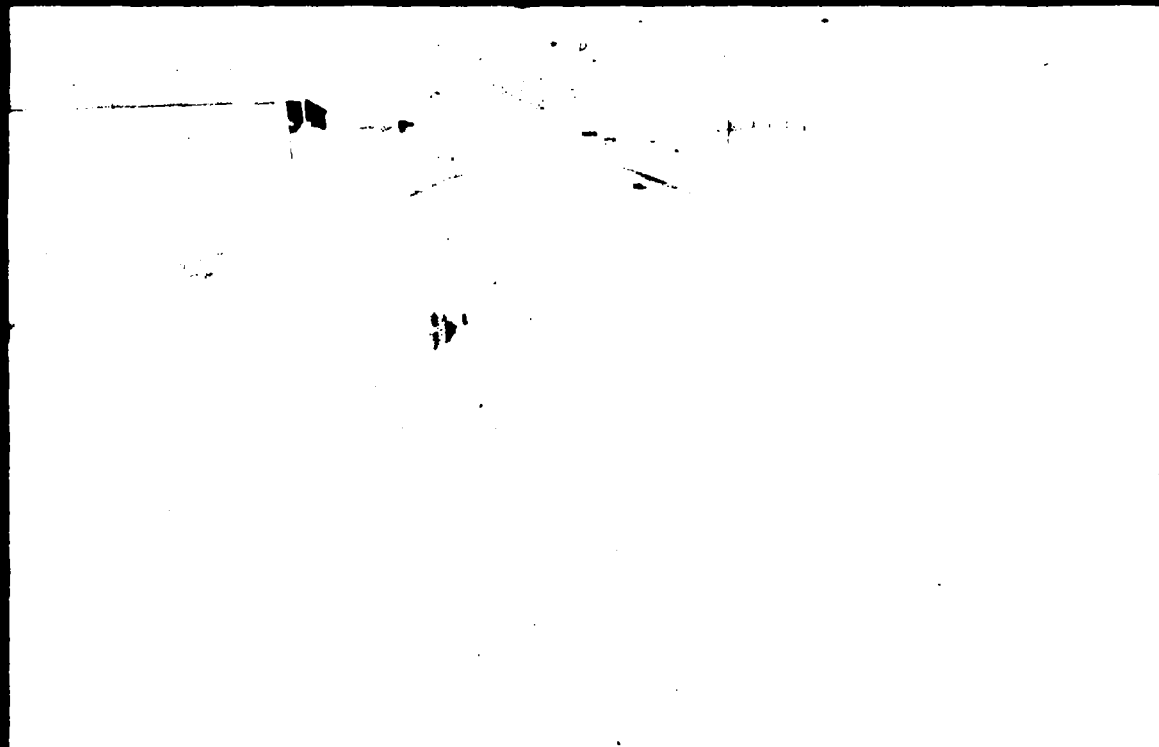
Site: Toledo Tie Treatment
Photo No: 8 (R2F18)
Direction: Northeast
Photographer: A. Hellie

Date: October 1, 1997
Subject: Dark brown oily material
 in Williams Ditch.



Site: Toledo Tie Treatment
Photo No: 9 (R2F19)
Direction: Northeast
Photographer: A. Hellie

Date: October 1, 1997
Subject: Stressed vegetation south
of Frenchmens Road in former lagoon
area.



Site: Toledo Tie Treatment
Photo No: 10 (R2F20)
Direction: East
Photographer: A. Hellie

Date: October 1, 1997
Subject: Stained pavement observed
on Frenchmens Road.



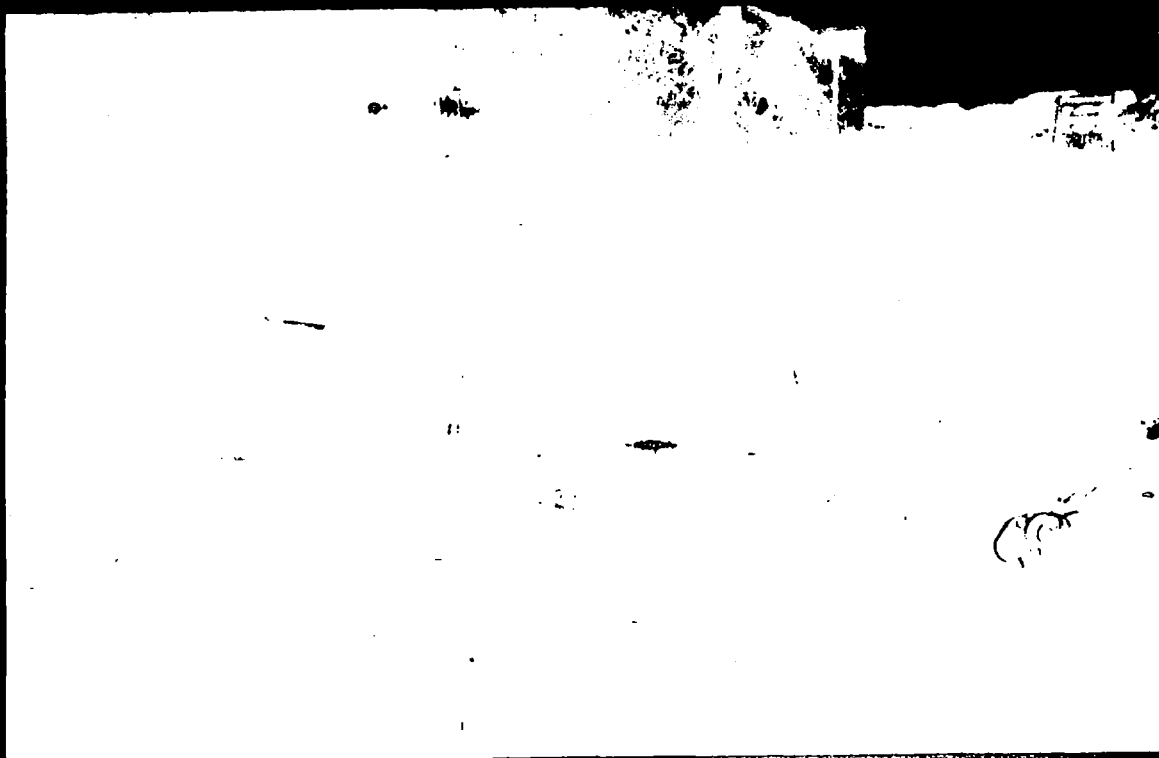
Site: Toledo Tie Treatment
 Photo No: 11 (R3F0)
 Direction: Northwest
 Photographer: C. Gibson

Date: October 27, 1997
 Subject: Additional boom placed
 with boom Number 4 in Williams
 Ditch north of the Radco building.



Site: Toledo Tie Treatment
 Photo No: 12 (R3F2)
 Direction: Northeast
 Photographer: C. Gibson

Date: October 27, 1997
 Subject: Solid boom ii being
 deployed by Heritage in Williams
 Ditch south of Pepsi Cola parking
 lot.



Site: Toledo Tie Treatment
 Photo No: 13 (R3F3)
 Direction: Northwest
 Photographer: C. Gibson

Date: October 27, 1997
 Subject: Solid boom i east of LBA
 Printing.



Site: Toledo Tie Treatment
 Photo No: 14 (R3F6)
 Direction: Northwest
 Photographer: C. Gibson

Date: October 27, 1997
 Subject: Absorbent pads at boom 4
 in Williams Ditch.



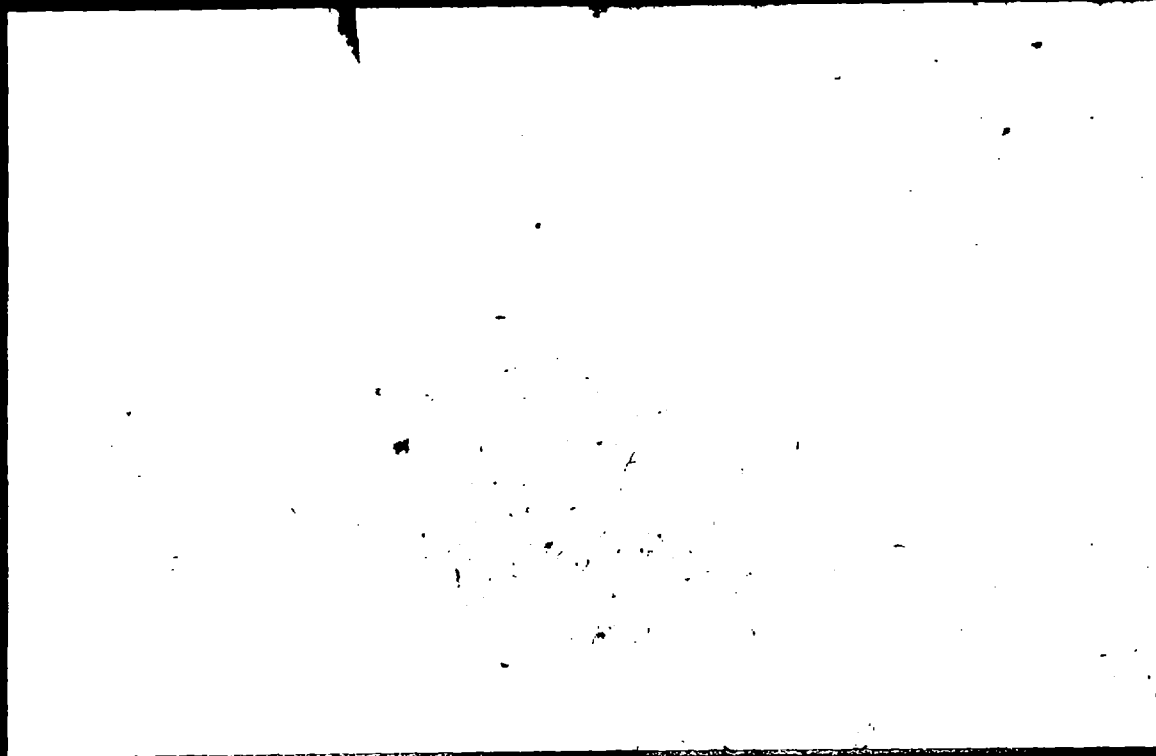
Site: Toledo Tie Treatment
 Photo No: 15 (R3F7)
 Direction: Northeast
 Photographer: C. Gibson

Date: October 14, 1997
 Subject: Oil contained by boom 2 in
 Williams Ditch.



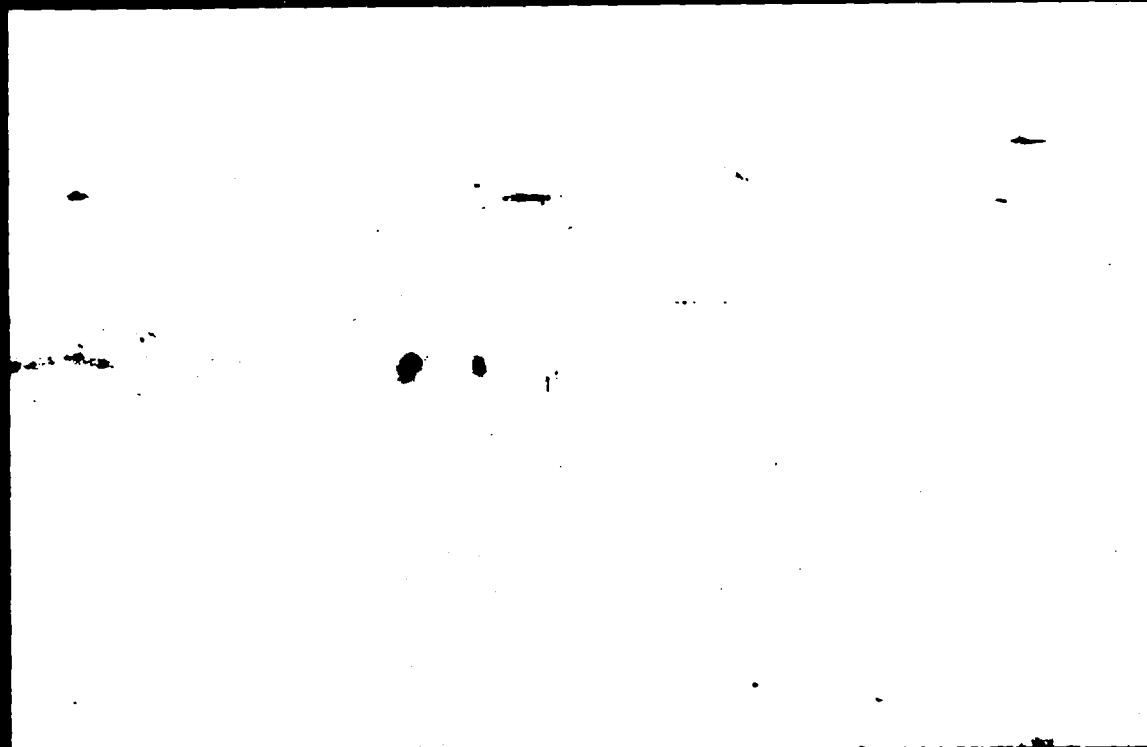
Site: Toledo Tie Treatment
 Photo No: 16 (R3F8)
 Direction: Northwest
 Photographer: C. Gibson

Date: October 14, 1997
 Subject: Oil contained by boom 1 in
 Williams Ditch.



Site: Toledo Tie Treatment
Photo No: 17 (R3F15)
Direction: West
Photographer: C. Gibson

Date: October 10, 1997
Subject: Sheen at the second bend
of Williams Ditch east of Arco
Drive.

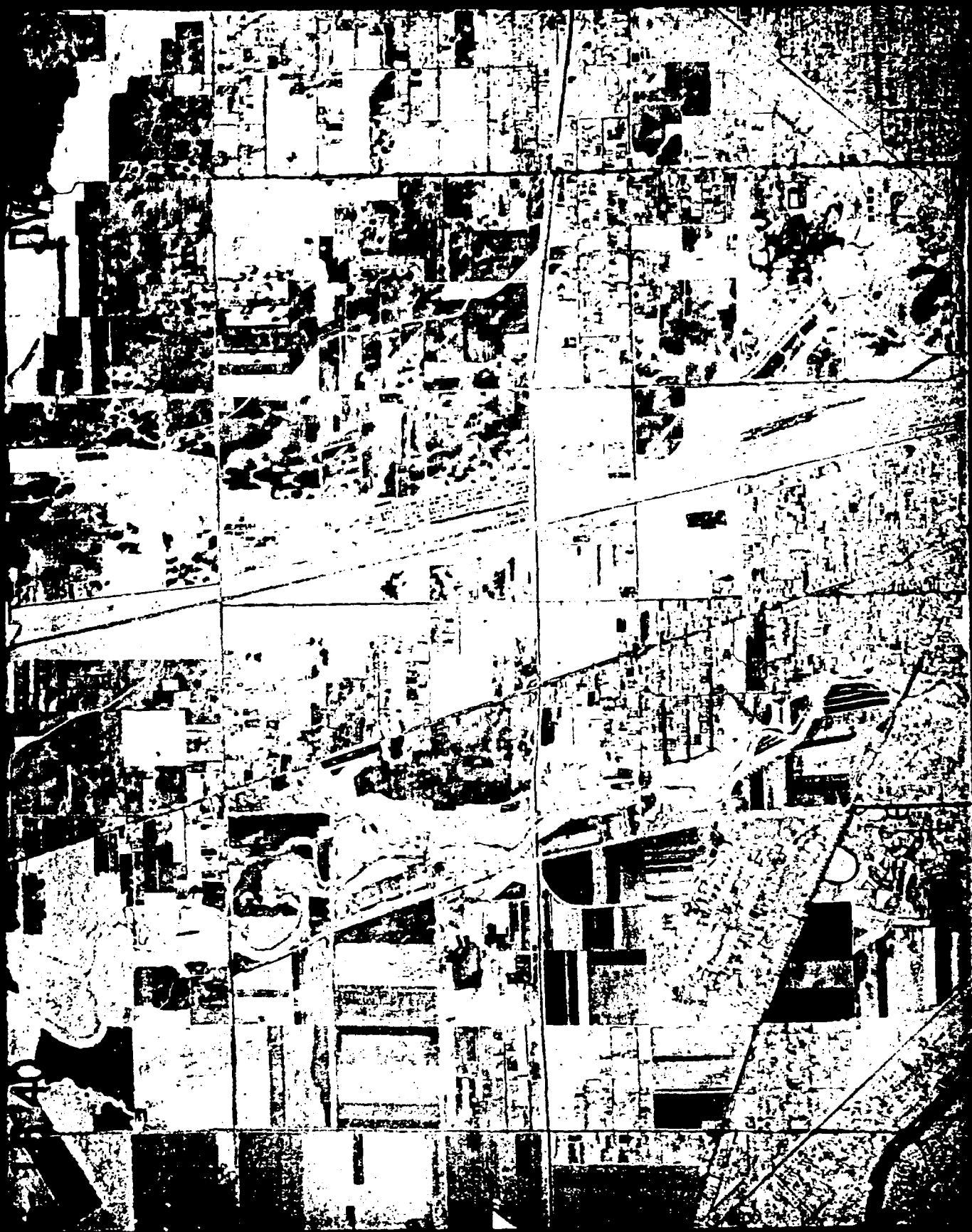


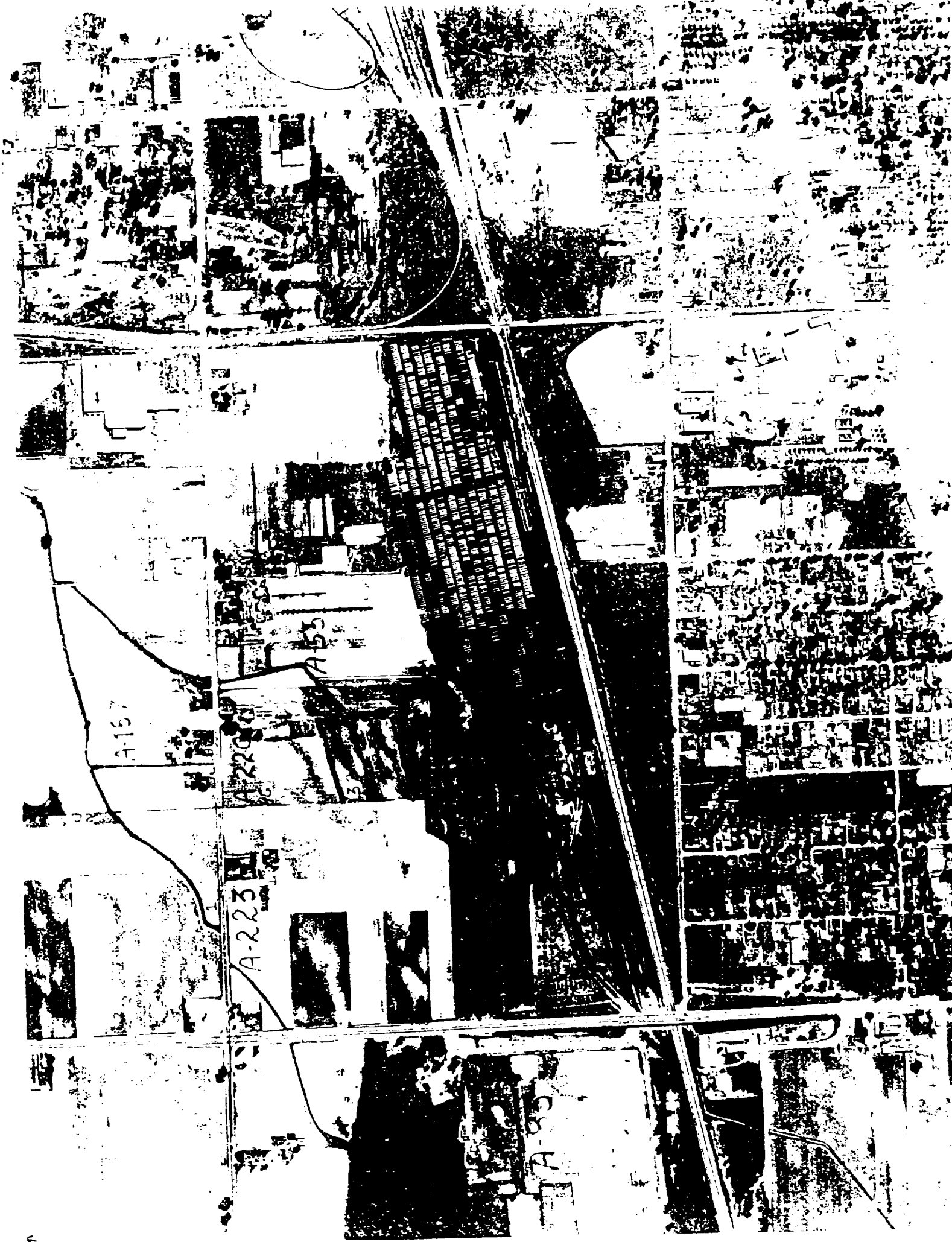
Site: Toledo Tie Treatment
Photo No: 18 (R3F18)
Direction: East
Photographer: C. Gibson

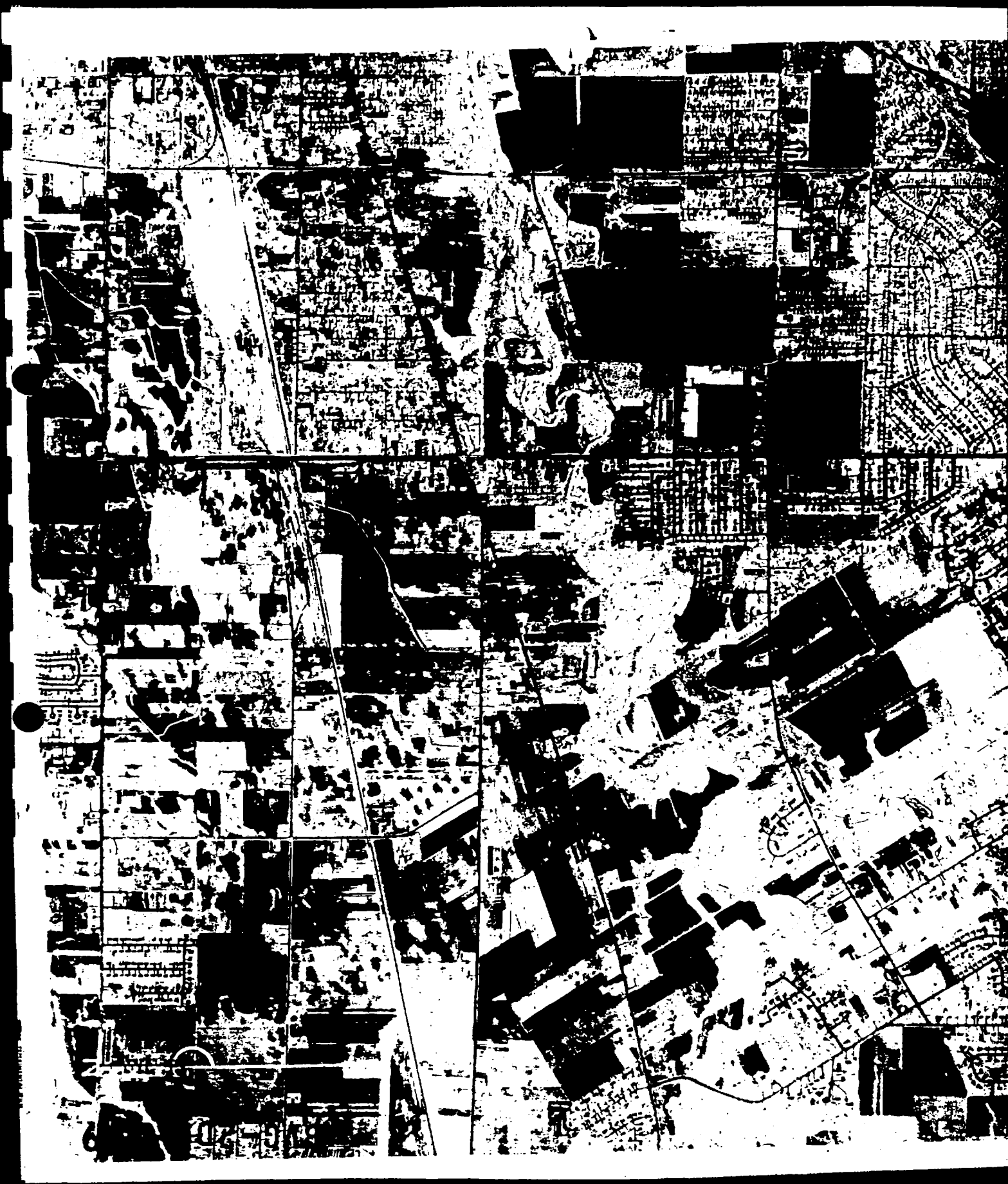
Date: October 8, 1997
Subject: Sheen on Williams Ditch
east of Arco Drive.

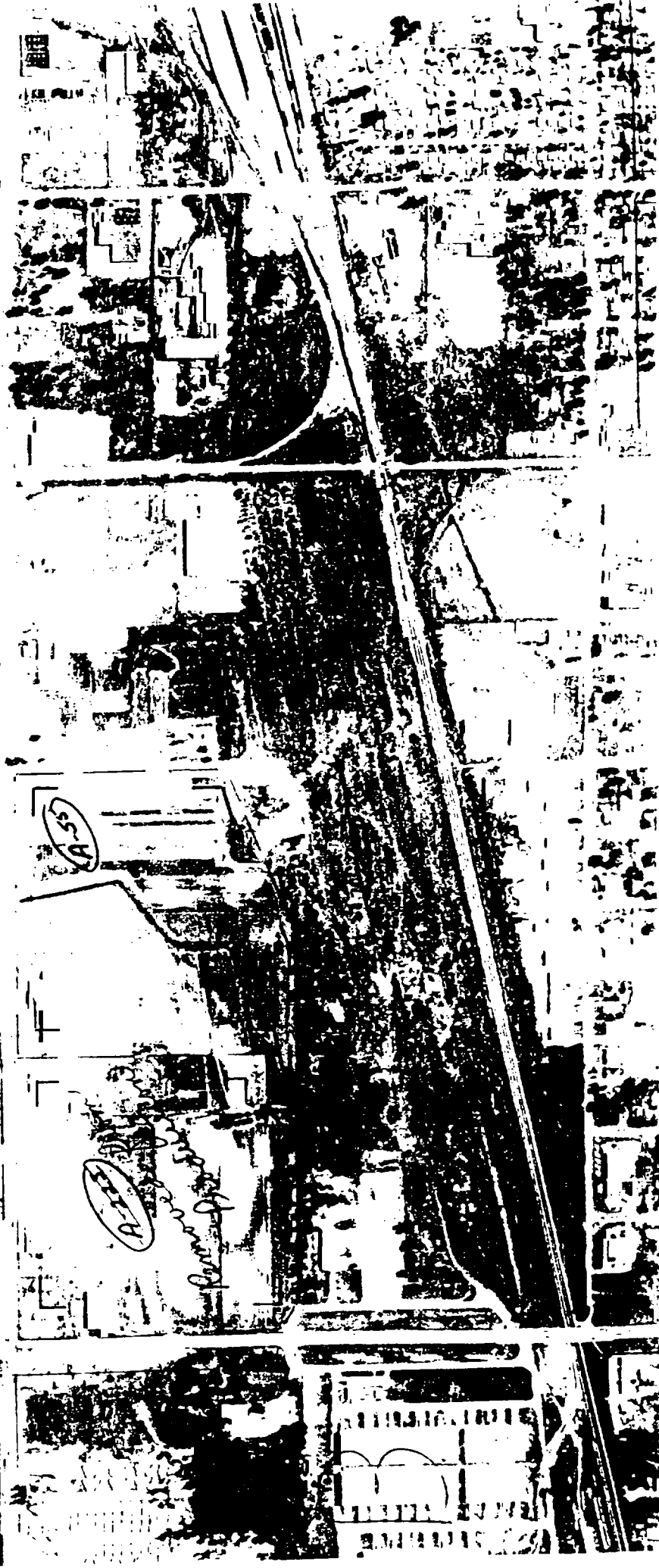
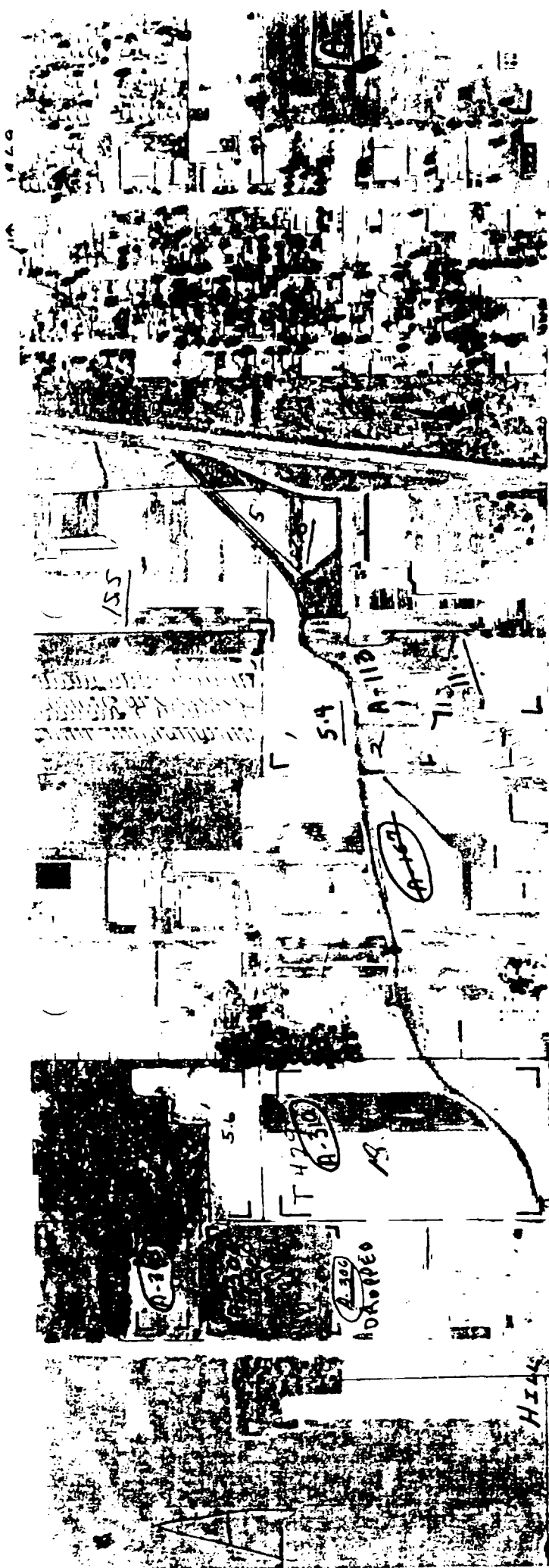
Attachment C

Aerial Photographs











Attachment D

**Videodocumentation
(Inside of Envelope)**

**VIDEOTAPE MAY BE VIEWED
AT**

**U.S. EPA / REGION 5
WMD FILE ROOM
7TH FLOOR
77 W. JACKSON BLVD.
CHICAGO, IL 60604**